

What is claimed is:

(Claim 1) 1. A cold cathode fluorescent flat lamp, comprising:
a cavity structure, comprising:
a cavity shell;
a plurality of spacers, disposed in the cavity shell, wherein a tolerance of a height of the spacers is larger than about 0.01mm, or the tolerance of the height of the spacers is in a range of about 1/20 to about 1/4 of the height of the spacers;
a hardening paste, disposed between the cavity shell and the spacers;
at least an electrode set, disposed on the cavity shell;
a fluorescent substance, disposed on a inner wall of the cavity shell; and
a discharge gas, disposed in the cavity shell.

(Claim 2) 2. The cold cathode fluorescent flat lamp of claim 1, wherein the height of the spacer is in a range of about 1mm to about 2mm.

(Claim 3) 3. The cold cathode fluorescent flat lamp of claim 1, wherein a thickness of the hardening paste is in a range of about 0.1mm to about 0.25mm.

(Claim 4) 4. The cold cathode fluorescent flat lamp of claim 1, wherein a thickness of the hardening paste is in a range of about 1/20 to about 1/4 of the height of the spacers.

(Claim 5) 5. The cold cathode fluorescent flat lamp of claim 1, wherein the hardening paste comprises glass paste.

(Claim 6) 6. The cold cathode fluorescent flat lamp of claim 1, wherein the cavity shell comprising:

a first substrate;

a second substrate, disposed over the first substrate; and

a frame, disposed between the first substrate and the second substrate and connected to an edge of the first substrate and an edge of the second substrate.

(Claim 7) 7. The cold cathode fluorescent flat lamp of claim 1, wherein an air pressure inside the cavity shell is less than an air pressure outside the cavity shell.

(Claim 8) 8. A cavity structure, comprising:

a cavity shell;

a plurality of spacers, disposed in the cavity shell, wherein a tolerance of a height of the spacers is larger than about 0.01mm, or the tolerance of the height of the spacers is in a range of about 1/20 to about 1/4 of the height of the spacers; and

a hardening paste, disposed between the cavity shell and the spacer.

(Claim 9) 9. The cavity structure of claim 8, wherein the height of the spacer is in a range of about 1mm to about 2mm.

(Claim 10) 10. The cavity structure of claim 8, wherein a thickness of the hardening paste is in a range of about 0.1mm to about 0.25mm.

(Claim 11) 11. The cavity structure of claim 8, wherein a thickness of the hardening paste is in a range of about 1/20 to about 1/4 of the height of the spacers.

(Claim 12) 12. The cavity structure of claim 8, wherein the hardening paste comprises glass paste.

(Claim 13) 13. The cavity structure of claim 8, wherein an air pressure inside the cavity shell is less than an air pressure outside the cavity shell.